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LIGHT-COLORED RESUPINATE POLYPORES—II

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Continuing the series of articles begun in *Mycologia* for March, 1920, descriptions and notes are here given of a number of resupinate polypores found mostly in the mycological herbarium of the New York Botanical Garden.

28. Poria rimosa Murrill, Mycologia 12: 91. 1920

This species was described from an unnumbered packet of specimens collected on Juniperus monosperma in New Mexico, October 23, 1911, by Hedgcock and Long. I have recently come across other packets of the same thing carefully laid away under a manuscript name assigned, I believe, by Mr. Long. I regret that I did not have this name at hand to use in publishing the species. One packet bears the same data as the type of P. rimosa, with the statement that the fungus follows the rot caused by Fomes texanus. Another specimen was collected on Juniperus sabinioides near Austin, Texas, November 16, 1911, W. H. Long 12024. It also followed rot caused by Fomes texanus. A third specimen was collected by Mr. Long on dead fallen logs of Juniperus at Cache, Oklahoma, September 29, 1912; while a fourth, numbered 9870, was obtained by Long and Hedgcock from a stump of Juniperus monosperma in New Mexico. The hymenium of these additional specimens is not nearly so closely rimose as in the type and the tubes are considerably longer.

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29. Poria semitincta (Peck) Cooke, Grevillea 14: 115. 1886

Polyporus semitinctus Peck, Ann. Rep. N. Y. State Mus. 31: 37. 1879.

Described as follows from specimens collected by Peck on the under surface of maple chips at Griffins, Catskill Mountains, New York, in September.

"Subiculum thin, soft, cottony, separable from the matrix, whitish, more or less tinged with lilac, sometimes forming branching creeping threads; pores very short, unequal, whitish or pale cream-color, the dissepiments at first obtuse, then thinner, toothed on the edge.

"This is a soft, delicate species, with merulioid pores, similar to those of *P. violaceus*. The lilac stains appear on the subiculum

only."

Three collections of this species in addition to the type are at Albany, collected by Peck at Ballston, South Bethlehem, and Lyndonville. According to Overholts, the spores measure $3-4 \times 2 \mu$.

In the herbarium here, there is an excellent specimen from the "Catskill Mts." sent by Peck to Ellis, which is attached to chips and leaves and shows shallow tubes and a wide margin with rhizomorphic strands. During a recent visit to Albany, I compared this with Peck's type and found the two identical.

Another specimen, collected by Fairman at Lyndonville, New York, in 1890, was sent to Ellis for determination, but was never named. It corresponds in form to those at Albany from Ballston and South Bethlehem. The largest collection we have was made by Ellis at Newfield in October, 1879, on dead stems of *Kalmia latifolia* still standing. This bears the name "Pol. aneirina Fr.," doubtless assigned it by Cooke, and is described by Ellis as "Milkwhite with a narrow, radiate-fibrose, snow-white margin. Pores oblique, medium size, margins thin, suberose."

30. Poria Myceliosa Peck, Bull. N. Y. State Mus. 54: 952. 1902

"Subiculum membranaceous separable from the matrix, connected with white branching strands of mycelium which permeate the soft decayed wood, or with radiating ribs which run through the broad sterile fimbriate white margin; pores very

short, subrotund angular or subflexuous, the dissepiments thin, acute, dentate or slightly lacerate, pale yellow; spores minute, subglobose, .00008–.00012 of an inch broad."

Described from specimens collected by Peck on much-decayed hemlock wood at Floodwood, New York, August 31, 1900. According to Overholts, the spores are ellipsoid, smooth, hyaline, 2.5–4×2 μ ; cystidia none; clamp connections abundant. I have a specimen collected by Atkinson in North Carolina which appears to match the type at Albany exactly. Overholts also reports it from Frankfort, Michigan, collected on hemlock wood by E. T. Harper. This species should be very carefully compared with *Poria semitincta*, from which it can scarcely be distinguished when the herbarium specimens are placed side by side.

31. Poria radiculosa (Peck) Sacc. Syll. Fung. 6: 314. 1888

Polyporus radiculosus Peck, Bull. N. Y. State Mus. 40: 54. 1887.

"Resupinate, effused, thin, soft, tender, orange-yellow, the mycelium creeping in and over the wood, silky-tomentose, at first white, then yellow, forming numerous yellow branching root-like strings or ribs which are more or less connected by a soft, silky tomentum; pores rather large, angular, at first shallow, sunk in the mycelium, the dissepiments becoming more elevated, thin and fragile; spores ellipsoid, .0002 to .00025 inch long, .00012 to .00016 broad.

"The species is allied to *P. Vaillantii*, in its peculiar rhizomorphoid strings of mycelium, but from this it differs decidedly in its color and texture. In these respects it approaches *P. bomby-cinus*, of which it may possibly be a peculiar variety. It is very destructive to the wood on which it grows, causing it to become soft, brittle and even friable."

Described as above from specimens collected by Peck at Gansevoort in September on half-buried aspen chips. I have examined the type at Albany and find it very unsatisfactory. The plate recently published by Mr. Overholts represents it well. According to him, the spores are oblong-ellipsoid, $5-7.5 \times 2.5-3 \mu$; cystidia none. The species will not be satisfactorily known by the present generation of mycologists until rediscovered.

32. Poria fimbriatella (Peck) Sacc. Syll. Fung. **6**: 303. 1888 Polyporus fimbriatellus Peck, Ann. Rep. N. Y. State Mus. **38**: 91. 1885.

Originally described as follows from specimens collected by Dr. Peck on maple logs at Osceola, New York, in August. Also collected by him on a maple trunk at Ampersand Pond.

"Widely effused, thin, tenacious, separable from the matrix, with a thin white fimbriate margin and a white subiculum, running into rhizomorphoid branching strings of mycelium or forming a somewhat reticulate fimbriate membrane; pores minute, subrotund, equal, whitish inclining to cream color.

"By its rhizomorphoid mycelium this species is related to P. Vaillantii, but the pores are smaller and not collected in heaps as in that species. By reason of its tenacious substance it is readily separable even from an irregular matrix."

I have recently had an opportunity to examine the types of this species, which are well preserved at Albany. According to Overholts, the spores are ellipsoid, $2.5-3.5 \times 2 \mu$; cystidia pointed, abundant, reaching 10–15 μ in diameter and projecting 10–30 μ .

33. Poria Griseoalba (Peck) Sacc. Syll. Fung. 6: 306. 1888

Polyporus griseoalbus Peck, Ann. Rep. N. Y. State Mus. 38: 91. 1885.

Described as follows from specimens collected by Peck on soft, decaying wood of deciduous trees at Osceola, New York, in July.

"Effused, thin, tender, adnate, uneven, scarcely margined, indeterminate, grayish-white, with a thin pulverulent subiculum; pores very minute, subrotund, often oblique.

"The pores are sometimes collected in little heaps of tubercles as in *P. molluscus* and *P. Vaillantii*. In the dried state they are slightly tinged with creamy yellow."

The type specimens at Albany are pure-white, delicate, with fairly regular hymenium, reminding me somewhat of *Poria tenuis* Schw. and of plants referred to *Poria vulgaris* by many American mycologists.

34. Poria linearis sp. nov.

Effused for many centimeters, continuous, inseparable, thin; margin not cottony, but membranous to leathery, appressed, broad and conspicuous, white or whitish; context quite conspicuous, tough, membranous, white to cream-colored, persistent; hymenium appearing in scattered areas over the subiculum, becoming continuous but remaining somewhat uneven, white to paleisabelline and at length pale-avellaneous; tubes rigid, thickwalled, oblique and appressed, often elongated to I cm. in length, 3 to a mm. or larger, mouths irregular, edges subentire; spores pip-shaped, smooth, hyaline, $5-7 \times 3-4 \mu$.

Type collected on a dead, standing, corticated, hardwood trunk at Marraganti, Panama, April 3–9, 1908, Robert S. Williams 1127. Mature specimens are remarkable for the series of interrupted parallel lines made by the obliquely appressed, greatly elongated tubes.

35. Poria hondurensis sp. nov.

Effused for several centimeters, the area covered much longer than wide, continuous, inseparable, thin; margin not cottony, inconspicuous, white; context inconspicuous, a mere whitish membrane; hymenium even, milk-white and unchanging, considerably cracked in dried specimens; tubes rigid, angular, less than 1 mm. long, 3–4 to a mm., edges thin-walled, entire; spores ellipsoid, smoth, hyaline, $4 \times 2.5 \mu$.

Type collected on the trunk and branches of a dead hardwood tree in British Honduras, during the winter of 1907, by *Morton E. Peck*. The wood remains rather firm but the bark has disappeared where the fungus occurs.

36. Poria Johnstonii sp. nov.

Effused for several centimeters, becoming continuous by confluence, inseparable, thin; margin conspicuous, cottony, milk-white even in dried specimens, much reduced with age; context thin, milk-white, of loosely-woven, cottony strands quite different from the usual membrane; hymenium uneven, white to cream-colored; tubes oblique, uniform in size and appearance, about I mm. long, angular, thin-walled, 3 to a mm., the edges projecting in long teeth; spore characters not satisfactorily obtained.

Type collected on the under side of a log of *Pseudotsuga* macrocarpa in the Upper San Antonio Canyon, San Antonio Mountains, Southern California, 5,700 ft. elevation, December 15, 1918, *I. M. Johnston* 252.

37. Poria salicina sp. nov.

Effused for many centimeters, becoming continuous by confluence, inseparable, rather thick; margin slight, appressed, fimbriate, white, inconspicuous with age; context a white membrane as thin as writing-paper; hymenium very uneven, white to cream-colored, glistening; tubes very thin-walled, somewhat collapsing and friable, mostly angular, very irregular in size and shape, 2–3 mm. long, usually about 3, but sometimes only 1, to a mm., edges becoming toothed or lacerate; spores ellipsoid, smooth, hyaline, $4.5 \times 2.5 \,\mu$.

Type collected on a dead willow trunk at Fern Hollow, near Pittsburgh, Pennsylvania, October 16, 1906, *David R. Sumstine* 25. Also collected by Mr. Sumstine on the same host at Kittanning, Pennsylvania, September 8, 1907.

38. Poria perextensa sp. nov.

Covering the under side of a large log, practically continuous, inseparable, thin; margin conspicuous, white, felty or cottony, the extreme edge composed of appressed, radiating fibers, often connected with mycelial cords; context white, membranous, persistent; hymenium uneven, following the irregularities of the substratum and developing in patches on the subiculum, at length continuous and changing from white to ochroleucous and finally isabelline; tubes shallow and reticulate at first, maturing slowly, becoming I mm. long, angular, thin-walled, unequal, pliable and soft but not collapsing, 2–3 to a mm., edges entire to toothed or lacerate; spores subglobose to broadly ovoid, smooth, hyaline, 3 μ long.

Type collected on a much-decayed log of a deciduous tree at "Boarstone Camp," north of Willimantic, Maine, September 12–14, 1905, W. A. Murrill 2520. This camp, situated on the northern slope of Boarstone Mountain, was one of a number made by Mr. Ricker and myself during our explorations in Maine.

39. Poria hymeniicola sp. nov.

Appearing in circular patches on the hymenium of a dead *Tyromyces* and increasing to 2 cm. or more in diameter, continuous, inseparable, rather thick; margin cottony, conspicuous, pure-white even in dried specimens; context white, scarcely visible as a membrane but filling many of the tubes of the *Tyromyces*; hymenium uneven, white, glistening; tubes angular, thinwalled, reaching 2 mm. in length, about 5 to a mm. at maturity, a few considerably larger, edges entire to slightly toothed; spore characters not satisfactorily obtained.

Type collected on old hymenophores of a species of *Tyromyces* attached to a dead poplar trunk at "Camp Sunday," Medford Township, Maine, August 28, 1905, W. A. Murrill 1920.

40. Poria separans sp. nov.

Widely effused, continuous, separating smoothly from the substratum, rather thick; margin thin, cottony, white to cream-colored, scarcely apparent in old specimens; context a thin, tough, persistent, white membrane; hymenium very even, glistening, white to cream-colored; tubes thin-walled but not collapsing, regular in shape and size, reaching 2 mm. in length, concolorous within, angular, 4 to a mm., edges fimbriate-dentate; spores subglobose, hyaline, smooth, $5\,\mu$.

Type collected on a dead log at East Hebron, New Hampshire, July 6, 1917, by *Percy Wilson*.

41. Poria roseitingens sp. nov.

Appearing in small, irregular patches on the bark and becoming several centimeters in extent by growth and confluence, inseparable, thin; margin filamentous, appressed, pure-white even in dried specimens, conspicuous in age; context white, a mere membrane; hymenium only tolerably even, milk-white when fresh, pale-rosy-isabelline when dry, except on the margin; tubes rather firm, very irregular in size, mostly 3 to a mm,, but often I mm. broad or larger, concolorous within, angular, thin-walled, edges entire to toothed or somewhat lacerate; spores copious, ellipsoid, hyaline, smooth, $3-4 \times 2-2.5 \mu$.

Type collected on a dead corticated log of *Pinus Massoniana* at Cinchona, Jamaica, 5,000 ft. elevation, December 25–January 8, 1908–9, W. A. & Edna L. Murrill 407.

42. Poria Cokeri sp. nov.

Appearing first in circular patches a few millimeters across, then increasing to a centimeter, and finally becoming confluent in areas 5 cm. or more long and 2 cm. wide, inseparable, rather thick, especially at the center of the patches; margin coarsely radiate-fibrous to membranous, conspicuous, 2–3 mm. broad when fairly young, milk-white even when dry; context white, membranous; hymenium somewhat uneven, white to slightly dirty-white, pale-ferruginous where bruised; tubes quite rigid, irregular in shape and size, 2–3 mm. long, concolorous within, mouths irregularly rounded or slightly angular, usually 3, but sometimes only 1, to a mm., edges entire to toothed; spores rounded-ovoid, smooth, hyaline, with a very distinct nucleus, $4 \times 3 \mu$.

Type collected on dead stems of a hedge of Ligustrum vulgare at Chapel Hill, North Carolina, December 9, 1914, W. C. Coker 1506. What appears to be the same species was collected on rotting hardwood logs at Star City, West Virginia, May 3, 1907, Carl P. Hartley 51.

43. Poria distorta sp. nov.

Widely effused, following the irregularities of the substratum, more or less continuous, separable, of medium thickness, drying in concave, distorted masses; margin broad when young, white to slightly discolored, cottony to membranous; context white, conspicuous, tough, membranous, persistent; hymenium very uneven, often nodulose, white to cremeous or somewhat discolored; tubes often oblique, fairly regular in shape and size when fully mature, I-2 mm. long, concolorous within, thin-walled, angular, 4–5 to a mm., edges rather firm, entire to slightly toothed; spores ellipsoid, smooth, hyaline, $3.5 \times 2.5 \mu$.

Type collected on very rotten wood in Pink Bed Valley, near Asheville, North Carolina, about 4,000 ft. elevation, July 13–24, 1908, W. A. Murrill & H. D. House 427.

44. Poria submollusca sp. nov.

Effused for several centimeters, continuous, inseparable, thin; margin cottony, delicate, conspicuous, milk-white even in dried specimens; context white, membranous; hymenium rather even, white, slightly cremeous in dried specimens; tubes mostly oblique, showing a tendency to collapse at times, becoming irregular in size and shape, I-2 mm. long, concolorous within, thin-walled,

mouths angular, 4–5 to a mm., edges at first entire but soon becoming notched or lacerate; spore characters not satisfactorily obtained.

Type collected on rotting bark and wood of hickory at St. Martinsville, Louisiana, August 3, 1889, A. B. Langlois 1883. What appears to be the same species is in the Underwood herbarium, collected at Ocean Springs, Mississippi, in 1896, on decayed pieces of the wood and bark of some deciduous tree.

45. Poria lignicola sp. nov.

Effused for several centimeters, becoming continuous, closely adhering, inseparable, thin; margin broad, conspicuous, white to pale-isabelline, cottony; context tough, membranous, persistent, pale-isabelline; hymenium even, glistening, pale-rosy-isabelline; tubes rigid, regular, angular, less than I mm. long, often oblique, thin-walled, 3–4 to a mm., edges almost entire; spore characters not satisfactorily obtained.

Type collected on a decorticated hardwood log at Alto Cedro, Cuba, March 19–20, 1905, F. S. Earle & W. A. Murrill 482. Also collected at the same time on a similar host, F. S. Earle & W. A. Murrill 448.

46. Poria montana sp. nov.

Effused for several centimeters, continuous, inseparable, rather thick; margin very slight, thin, closely appressed, pure-white even in dried specimens; context white, ordinarily a mere membrane, but in cracks or hollows in the decayed substratum becoming dense and cottony; hymenium even, glistening, white to straw-colored; tubes rigid, fairly regular in shape and size, angular, about 6 to a mm. and reaching 3 mm. in length, edges thin, entire; spore characters not satisfactorily obtained.

Type collected on a well-rotted coniferous trunk near New Haven Gap, above Cinchona, Jamaica, 5,600 ft. elevation, January 4, 1909, W. A. & Edna L. Murrill 765.

47. Poria arachnoidea sp. nov.

Effused for several centimeters, continuous, inseparable, thin; margin broad and very delicate, like a spider's web, white to cream-colored; context inconspicuous; hymenium even, white to

cream-colored, glistening, continuous at maturity; tubes delicate, regular, angular; scarcely I mm. long, 4 to a mm., edges very thin-walled, entire; spore characters not satisfactorily obtained.

Type collected on a much-decayed piece of oak wood near St. Martinsville, Louisiana, October 25, 1897, A. B. Langlois 2556. Also collected at Opeloussas, Louisiana, May 14, 1889, A. B. Langlois 1734. Accompanying the latter specimen is a field note referring to the arachnoid, white subiculum as a very peculiar character.

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